

ABSTRACT OF THE DISCLOSURE

A rotary electrostatic microactuator that includes a substantially planar substrate and a rotatable member overlying the substrate for rotation about an axis of rotation extending perpendicular to the planar substrate. First and second spaced-apart springs and a plurality of comb drive assemblies are included. Each of the comb drive assemblies has a first comb drive member mounted on the substrate and a second comb drive member. Each of the first and second comb drive members are provided with arcuate comb drive fingers. Each of the first and second springs has a first end portion secured to the substrate and a second end portion secured to at least one of the second comb drive members for suspending the second comb drive members and the rotatable member over the substrate. The second comb drive members are movable in a direction of travel about the axis of rotation between a first position in which the comb drive fingers of the first and second comb drive members are not substantially fully interdigitated and a second position in which the comb drive fingers of the first and second comb drive members are substantially fully interdigitated.

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